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**Sugimoto**

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(54) **INFORMATION PROCESSING APPARATUS  
AND INFORMATION OUTPUT  
CONTROLLING METHOD**

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704/235; 704/260

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(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,534,888 A \* 7/1996 Lebby et al. .... 345/672  
5,710,576 A \* 1/1998 Nishiyama et al. .... 345/169  
5,847,698 A \* 12/1998 Reavey et al. .... 345/173

5,859,594 A \* 1/1999 King et al. .... 340/7.55  
5,874,947 A \* 2/1999 Lin ..... 345/169  
5,898,600 A \* 4/1999 Isashi ..... 708/105  
5,954,514 A \* 9/1999 Haas et al. .... 434/317  
5,991,594 A \* 11/1999 Froeber et al. .... 434/317  
6,064,855 A \* 5/2000 Ho ..... 434/317  
6,313,828 B1 \* 11/2001 Chombo ..... 345/169  
2001/0043194 A1 \* 11/2001 Amron ..... 345/169

\* cited by examiner

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(57) **ABSTRACT**

An information processing apparatus wherein playback of display data and playback of audio data relating to the display data are changed over in an associated relationship with each other in response to an open or closed state of a lid mounted on a housing, includes the portable housing having an image display section provided thereon, the lid mounted for opening and closing motion on the housing for covering the display section, a lid opening/closing detection section for detecting opening or closing of the lid with respect to the housing, a display control section for displaying display data on the image display section, an audio playback section for playing back audio data relating to the display data, and a control section for controlling the audio playback section so as to play back, when opening or closing of the lid is detected by the opening/closing detection section, the audio data relating to the display data displayed when the opening or closing of the lid is detected by the lid opening/closing detection section.

**17 Claims, 14 Drawing Sheets**

